

Fisheries - Current Structure

		2006 Actual	2007 CR	Internal Transfer	2008			Change From 2007 (+/-)
					Fixed Costs & Related Changes (+/-)	Program Changes (+/-)	Budget Request	
Hatchery Operations & Maintenance	(\$000)	57,139	61,125	-	-	-	-	-
	FTE	461	466	-	-	-	-	-
Fish and Wildlife Management	(\$000)	59,349	53,487	-	-	-	-	-
	FTE	317	320	-	-	-	-	-
Impact of the CR	(\$000)	-	[229]	-	-	-	-	-
Total, Fisheries	(\$000)	116,488	114,612	-	-	-	-	-
	FTE	778	786	-	-	-	-	-

Proposed Budget Restructure

The Service proposes to restructure the Fisheries Program budget to better reflect the contemporary conservation activities accomplished by the Program, and to provide for more effective budget allocation and management of appropriated funds consistent with its mission and strategic plans. Consequently, the Service proposes to rename the program the Fisheries and Aquatic Resource Conservation Program (Fisheries). Additionally, offices formerly known as Fishery Resource Offices will be called Fish and Wildlife Conservation Offices (FWCO).

The Fisheries Program budget structure currently has two subactivities:

- Hatchery Operations and Maintenance, and
- Fish and Wildlife Management.

Restructuring the Fisheries budget in FY 2008 will help promote better integration of budget with performance and will provide greater understanding and transparency of its wide range of activities. The proposed budget structure includes five subactivities to provide a stronger management tool for budget development, execution, and reporting. These five subactivities are:

- National Fish Hatchery System Operations
- Maintenance and Equipment
- Aquatic Habitat and Species Conservation
- Aquatic Invasive Species
- Marine Mammals

This proposal addresses Congressional guidance to improve the Fisheries Program budget structure to more efficiently implement its strategic plan, and to track performance against that plan (House Report 108-542 General Provision 8). The restructuring is also integral to the Fisheries Program's efforts to implement the results of Program Assessment Rating Tool (PART) reviews, and advance the goals of the President's Management Agenda. The following tables provide a crosswalk from the current program structure into the proposed structure.

Crosswalk between Current and Proposed Structures (\$000)

Fisheries & Aquatic Resource Conservation		Current Subactivities					2007 Request, Total Proposed Structure	2008 Request, Total Proposed Structure	Change from 2007 (+/-)
		Hatchery O & M		Fish & Wildlife Management					
		Fish Hatchery Operations	Hatchery Maintenance	Anadromous Fish Mgmt	Fish and Wildlife Assistance	Marine Mammals			
Proposed Subactivities	National Fish Hatchery System Operations	44,280	-	-	-	-	44,280	45,147	+867
	Maintenance & Equipment	-	16,587	165	1,091	-	17,843	18,105	+262
	Aquatic Habitat & Species Conservation	258	-	10,176	34,252	-	44,686	53,572	+8,886
	Aquatic Invasive Species	-	-	-	5,360	-	5,360	5,407	+47
	Marine Mammals	-	-	-	-	2,443	2,443	2,523	+80
Total, Current Structure		44,538	16,587	10,341	40,703	2,443	114,612	124,754	+10,142

Fisheries and Aquatic Resource Conservation – Proposed Structure

		2006 Actual	2007 CR	Internal Transfers	Fixed Costs & Related Changes (+/-)	Program Changes (+/-)	2008 Budget Request	Change From 2007 (+/-)
National Fish Hatchery Operations	(\$000)	-	[44,280]	+44,280	+1,340	-473	45,147	+867
	FTE	-	[383]	+383		0	383	0
Maintenance and Equipment	(\$000)	-	[17,843]	+17,843	+262	+0	18,105	+262
	FTE	-	[83]	+83		0	83	0
Aquatic Habitat & Species Conservation	(\$000)	-	[44,686]	+44,686	+1,136	+7,750	53,572	+8,886
	FTE	-	[289]	+289		+22	311	+22
Aquatic Invasive Species	(\$000)	-	[5,360]	+5,360	+47	0	5,407	+47
	FTE	-	[12]	+12			12	0
Marine Mammals	(\$000)	-	[2,443]	+2,443	+80	0	2,523	+80
	FTE	-	[19]	+19		0	19	0
Impact of the CR	(\$000)	-	[229]	-	-	[-229]	-	
Total, Fisheries and Aquatic Resource Conservation	(\$000)	-	[114,612]	114,612	+2,865	+7,277	124,754	+10,142
	FTE	-	[786]	+786	0	+22	808	+22

* FY 2007 CR amounts are shown for comparison purposes between the current Fisheries budget structure and the proposed structure. With the implementation of ABC and other improvements on our financial, personnel, and information systems, it is expected that more accountable funding and FTE levels will be made available as the Service evaluates the internal transfer of funding to the proposed structure. This will be closely tracked and reported throughout FY 2007 and FY 2008. Consequently, a re-alignment may be needed at some point to adjust program funding and FTE reporting to reflect the improved data.

Summary of 2008 Program Changes for Fisheries and Aquatic Resource Conservation

Request Component	Amount	FTE
Program Changes		
• Fish Passage Program	+6,000	+18
• National Fish Habitat Action Plan	+2,250	+4
• Alaska Fisheries Subsistence Management Program	-500	0
• Fish Health/Whirling Disease Survey	-473	0
• Impact of the CR [Non-Add]	[-229]	0
Total, Program Changes	+7,277	+22

The 2008 budget request for Fisheries and Aquatic Resource Conservation is \$124,574,000 and 808 FTE, a net program change of \$7,277,000 and 22 FTE from the 2007 President's budget.

Impact of 2007 Continuing Resolution (-\$229,000)

The 2008 budget restores the priorities of the 2007 President's budget by funding 2007 programmed fixed cost increases, eliminating unrequested 2006 congressional earmarks, and implementing the program enhancement and program reduction initiatives included in the 2007 President's budget.

Fisheries and Aquatic Resource Conservation Program Overview

The mission of the Service's Fisheries Program is to work with partners to restore and maintain fish and other aquatic resources at self-sustaining levels, and to support Federal mitigation programs for the benefit of the American public. Since 1871, the Fisheries Program has played a vital role in conserving America's fisheries, and today is a key partner with States, Tribes, other Federal agencies, and private interests in a larger effort to conserve fish and other aquatic resources.

The Program components include the National Fish Hatchery System (NFHS), the Fish and Wildlife Conservation program, the Aquatic Invasive Species program, and the Marine Mammals program, with about 800 employees located nationwide in 64 Fish and Wildlife Conservation Offices (including a Conservation Genetics Laboratory), 70 National Fish Hatcheries, 9 Fish Health Centers, 7 Fish Technology Centers, one Historic National Fish Hatchery, and in Aquatic Invasive Species and Marine Mammals Program offices. These employees and facilities provide a network that is unique in its broad on-the-ground geographic coverage, its array of technical and managerial capabilities, and its ability to work across political boundaries and embrace a national perspective.

America's fish and other aquatic resources are among the world's richest and provide substantial social, economic, and ecological benefits to the Nation. Despite conservation efforts by the Service and its partners, many aquatic resources are declining at alarming rates. Almost 400 aquatic species either have, or need, special protection in some part of their natural or historic range. The reasons for these declines are linked largely to habitat loss and the impacts of harmful non-native species.

In order to better conserve aquatic resources, the Service and its diverse partners and stakeholders refocused the Fisheries Program and developed a strategic vision, *Conserving America's Fisheries: Fisheries Program Vision for the Future*. The National Fisheries Program Strategic Plan was developed as a logical extension of the *Vision*, providing strategies to implement the *Vision's* seven focus areas and performance measures and targets designed to track progress. All Fisheries Program goals are linked to Outcome Goals in the Department of the Interior's Strategic Plan.

The following seven focus areas, each with associated goals, strategies, and performance targets are detailed in the National Fisheries Program Strategic Plan:

- Partnerships and Accountability
- Aquatic Species Conservation and Management
- Aquatic Habitat Conservation and Management
- Public Use
- Cooperation with Native Americans
- Leadership in Science and Technology
- Workforce Management.

The Fisheries Program is an important partner working to conserve America's fish and other aquatic species. Many factors are beyond the Program's control, including wildfires, drought, floods, predation, and the contributions of partners. Nonetheless, achieving targets detailed in the Strategic Plan will help to sustain healthy fisheries and move toward restoration and recovery of imperiled species, including the ultimate goal of recovering aquatic species listed under the *Endangered Species Act*.

In 2006, the Program worked closely with DOI and OMB as it underwent the Administration's comprehensive Performance Assessment Rating Tool (PART) review. The Program earned a rating of "Effective," the highest in the Service to date. The Fisheries Program has made significant progress in improving its program purpose and design, strategic planning, program management and

program results/accountability, with the end result of delivering its aquatic resource mission to the American public.

The Fisheries Program has performance measures that reflect the purpose of the program, and performance targets that are realistic, ambitious, and achievable. Through the PART process, the program refined its performance measures to more accurately describe outcomes and how they are achieved through the program's work. In 2006, the program implemented an online version of its Fisheries Information System, used to track the program's needs, accomplishments, and performance.

Use of Cost and Performance Information

- The Fisheries Program tracks costs through Activity Based Costing, links costs to performance, and utilizes the information for program management. For example, in FY 2005, the program used ABC data to track progress in becoming more habitat-based, and used cost-performance data to explore alternative funding allocation methods.
- The Fisheries Program uses the Fisheries Information System (FIS) and the Fish Passage Decision Support System to track priority needs, outcomes, performance, and cost drivers (e.g. populations, fish barriers). In 2006, FIS was integrated into the Service's Environmental Online Conservation System (ECOS) to provide a central access point and integrated analysis tools for program management information. After several months of training at the Region and field levels, the web-based FIS system came online in July 2006. This powerful tool is being enhanced further to link with other Service databases, such as the Endangered Species' Recovery On-line Reporting Database (ROAR) system.
- The Marine Mammal Program continues to improve and implement population surveys in partnership with U.S. Geological Survey/Biological Resources Discipline (USGS/BRD) and to assess subsistence harvest levels and trends of sea otters, walrus, and polar bears in Alaska. This information is used to make cost projections for long-term monitoring strategies that assess the status and trends of marine mammal populations, and fiscal resources are targeted to the most effective and efficient strategies. Through these efforts, the Service has identified 4 out of the 10 marine mammal stocks that are being managed at self-sustaining levels. In addition, these efforts have enhanced the Service's understanding of the population trends for 6 of the 10 stocks. The Service's Marking, Tagging, and Reporting program provides the ability to monitor subsistence harvest over time and how it relates to the status and trends.
- In FY 2001, the National Fish Hatchery System's deferred maintenance backlog was identified at \$305 million. NFHS personnel actively participated in interagency development of standardized terminology for asset management and repair need categorization, and implemented a rigorous 5-Year Condition Assessment process (cycle), to verify and prioritize deferred maintenance needs within the \$1.5 billion NFHS infrastructure. Due to a combination of these processes and completion of high-priority deferred maintenance projects, the deferred maintenance backlog has been reduced to \$139 million in FY 2006 - a 54% decrease.
- In FY 2006 the NFHS, FWMA, and ANS programs were included in a comprehensive PART of the Service's Fisheries Program. The Fisheries Program worked closely with Department and OMB staff to determine the many areas of success and those that could be improved. The final ratings have not been released to date, but the Fisheries Program is poised to rate highly. With the Department and OMB, the Program identified 13 areas of improvement to continue efficient and effective delivery of its mission for the benefit of the American public. The Fisheries Program views the PART as a valuable process to ensure continued improvement in program management and to improve and enhance all aspects of linking performance management and accountability with budget.

Fisheries Program Performance Overview

Measure	2004 Actual	2005 Actual	2006 Plan	2006 Actual	2007 Plan	2007 Change from 2006	2008 Request	2008 Change from 2007
CSF 13.1A % of populations of aquatic threatened and endangered species (T&E) that are self-sustaining in the wild (Fisheries PART).	15% (67/451)	9% (38/416)	22% (97/435)	9% (55/592)	10% (61/594)	+1%	10% (61/594)	0
% of populations of aquatic threatened and endangered species (T&E) with known biological status that are self-sustaining in the wild (Fisheries PART).	n/a	75% (113/150)	77% (142/185)	31% (55/177)	31% (55/177)	0	31% (55/177)	0
# 13.1A.13 % of aquatic T&E populations managed or influenced by the Fisheries Program for which current status (e.g., quantity and quality) and trend is known (Fisheries PART).	n/a	13% (62/479)	12% (62/516)	51% (300/592)	48% (286/594)	-3%	48% (286/594)	0
# 13.1A.14 % of aquatic T&E populations managed or influenced by the Fisheries Program with approved Recovery plans (Fisheries PART).	n/a	44% (228/516)	44% (228/516)	81% (477/592)	81% (482/594)	0	81% (482/594)	0
% of tasks implemented as prescribed in Recovery plans (Fisheries PART).	59% (116/195)	77% (155/202)	67% (180/270)	54% (525/967)	54% (525/967)	0	54% (525/967)	0

Measure	2004 Actual	2005 Actual	2006 Plan	2006 Actual	2007 Plan	2007 Change from 2006	2008 Request	2008 Change from 2007
# 7.1.19 % of populations of native aquatic non-T&E species that are self-sustaining in the wild, as prescribed in management plans (Fisheries PART).	22% (258/1,165)	23% (266/1,165)	23% (276/1,175)	16% (224/1,411)	11% (157/1,409)	-5%	11% (157/1,409)	0
CSF # 7.2 % of populations of native aquatic non-T&E species managed or influenced by the Fisheries Program for which current status (e.g., quantity and quality) and trend is known (Fisheries PART).	34% (392/1,165)	34% (392/1,165)	34% (394/1,165)	31% (473/1,515)	32% (454/1,409)	+1%	32% (454/1,409)	0
# 7.2.5 % of populations of native aquatic non T&E species with approved management plans (Fisheries PART).	46% (538/1,165)	47% (543/1,165)	52% (602/1,165)	51% (777/1,515)	51% (722/1,409)	0	51% (722/1,409)	0
% of tasks implemented as prescribed in management plans (Fisheries PART).	66% (495/748)	72% (413/572)	43% (459/1,080)	47% (1,396/2,957)	47% (1,396/2,957)	0	47% (1,396/2,957)	0
# 15.4.1 # of activities conducted to support the management/control of aquatic invasive species (Fisheries PART).	40	41	42	42	43	+1	43	0
% of fish populations at levels sufficient to provide quality recreational fishing opportunities (Fisheries PART).	n/a	20% (201/990)	20% (201/990)	26% (249/990)	26% (249/990)	0	26% (249/990)	0

Measure	2004 Actual	2005 Actual	2006 Plan	2006 Actual	2007 Plan	2007 Change from 2006	2008 Request	2008 Change from 2007
# of waters where the Fisheries Program provides recreational fishing opportunities to mitigate the impacts of Federal water development projects (Fisheries PART).	n/a	221	221	221	221	0	221	0
# 7.1.13 pounds/dollar (lbs/\$) of healthy rainbow trout produced for recreation (Fisheries PART).	n/a	.33lb/\$1	\$.35lb/\$1	.33lb/\$1	.35lb/\$1	+.02lb/\$1	.35lb/\$1	0
% of mitigation tasks implemented as prescribed in approved management plans (Fisheries PART).	n/a	90% (9/10)	54% (7/13)	67% (33/49)	67% (33/49)	0	67% (33/49)	0
# 11.1.2 Condition of mission critical water management assets as measured by the DOI FCI. (PART)	.011 \$6,381,985/\$568,584,822	0.185 \$184,929,983/\$1,001,592,758	0.182 \$349,309,154/\$1,921,968,658	0.096 \$101,665,544/\$1,059,605,059	0.086 \$96,081,362/\$1,115,216,172	-0.010 -\$5,584,182/+55,611,113	0.086 \$96,081,362/\$1,115,216,172	0
% of marine mammal species that are managed to self-sustaining levels, in cooperation with affected States and others, as defined in approved management documents	50% (5/10)	40% (4/10)	40% (4/10)	40% (4/10)	40% (4/10)	0	40% (4/10)	0
% of populations managed or influenced by the Marine Mammal Program for which current population trend is known	60% (6/10)	60% (6/10)	60% (6/10)	60% (6/10)	60% (6/10)	0	70% (7/10)	10% (1/10)

Measure	2004 Actual	2005 Actual	2006 Plan	2006 Actual	2007 Plan	2007 Change from 2006	2008 Request	2008 Change from 2007
# of current marine mammal stock assessments	6	6	4	4	6	+2	6	0
# of marine mammal stocks with voluntary harvest guidelines	2	2	2	2	2	0	3	0
# of cooperative agreements with Alaska Natives for marine mammal management and monitoring	3	3	3	3	3	0	3	0
# of marine mammal stocks with incidental take regulations that require mitigating measures	2	2	2	2	3	+1	3	0

Note: For marine mammals in this table, "Percent of marine mammal species that are managed to self-sustaining levels, in cooperation with affected States and others, as defined in approved management documents," refers to stocks of marine mammals that are at optimum sustainable population under the MMPA. The Service manages stocks so that they remain at OSP or are increasing towards OSP. Although funding for marine mammals is proposed to be reduced by \$2 million in FY 2008, planned performance does not show a decrease in species managed to self-sustaining levels - this is because affecting a change in OSP status is a cumulative process that would result from multiple years of reduced management activities. Similarly, the Marine Mammal Program plans to increase, by one, the number of populations for which current population trend is known in FY 2008 despite a proposed reduction in funding. This is the result of multiple years of design, testing, and implementation of a walrus survey – understanding the trend of this species is possible in FY 2008 after previous years' efforts and funding. In future years, without surveys and analysis, this understanding will diminish. Similarly, although the Service will maintain 3 cooperative agreements with Alaska Natives in the long term through base funds, these agreements will be reduced in scope, and in the number of joint efforts they foster, in FY 2008 and beyond. An outcome of this is that the Service and Alaska Native Organizations may not be able to maintain voluntary harvest guidelines for one stock of marine mammals.

Note: Fisheries performance measures in this table report to measures identified and approved through the Fisheries 2008 PART. Performance measures reported in program change packages are work load measures that contribute to the long-term outcome-oriented Fisheries PART measures listed above. Change measures are essentially components of the Fisheries outcome measures, i.e., the number of population assessments conducted for T&E populations contributes directly to the measure 13.1A.13: % of aquatic T&E populations managed or influenced by the Fisheries Program for which current status (e.g., quantity and quality) and trend is known (Fisheries PART), and the number of instream/shoreline miles restored for non-T&E populations contributes directly to the measure 7.1.19: % of populations of native aquatic non-T&E species that are self-sustaining in the wild, as prescribed in management plans (Fisheries PART).

National Fish Hatchery System Operations – Proposed Structure

	2006 Actual	2007 CR	Internal Transfer	2008			Change from 2007 (+/-)
				Fixed Costs & Related Changes (+/-)	Program Changes (+/-)	Budget Request	
National Fish Hatchery System Operations (\$000)	-	[44,280]	+44,280	+1,340	-473	45,147	+867
FTE	-	[383]	+383		0	383	0

Summary of 2008 Program Changes for National Fish Hatchery System Operations

Request Component	Amount	FTE
Program Change		
• Fish Health Survey	-473	0
Total, Program Change	-473	0

Justification of 2008 Program Changes

The 2008 budget request for NFHS Operations is \$45,147,000 and 383 FTE, a program change of -\$473,000 and 0 FTE from the 2007 President's Budget.

Fish Health Survey (-\$473,000)

Since FY 1997, base Fish Health funds have been used to accomplish the National Wild Fish Health Surveys, which monitor waterbodies for emerging diseases, and to conduct actual fish sampling. The surveys have generated significant information that has been applied in field settings for the identification and management of emerging conservation issues such as Viral Hemorrhagic Septicemia (VHS) and Spring Viremia of Carp (SVC). The Service continues to view emerging conservation issues related to aquatic animal health as a major concern and will utilize approximately \$1 million in base funding to sample in high priority areas.

Program Performance Change: Fish Health Survey

Measure	2004 Actual	2005 Actual	2006 Actual	2007 CR	2008 Base Budget (2007 PB+ Fixed Costs)	2008 Plan	Program Change Accruing in 2008	Program Change Accruing in Outyears
					A	B=A+C	C	D
% DOI watershed units with current wild fish health surveys (PART)	25% 532/2111	27% 577/2111	30% 740/2468	30% 740/2468	34% 840/2468	33% 823/2468	-1% (-17 fewer DOI units)	0

Program Overview

The National Fish Hatchery System consists of 70 National Fish Hatcheries (NFHs), 9 Fish Health Centers (FHCs), 7 Fish Technology Centers (FTCs), one Historic National Fish Hatchery (HNFH), and the Aquatic Animal Drug Approval Partnership (AADAP) Program. These facilities and their highly-trained personnel provide national leadership in the propagation of healthy and genetically appropriate native aquatic animals and plants to help re-establish wild populations, and scientific leadership in development of aquaculture, fish nutrition, and disease diagnostic and treatment technologies. The NFHS is a key contributor to accelerating the recovery of aquatic species listed under the Endangered Species Act (ESA) and initiating the proactive restoration of aquatic species where populations are declining, thus precluding the need for listing a species.

The NFHS directly contributes to the recovery of threatened and endangered aquatic species/populations, including development and refinement of captive propagation techniques, development and maintenance of genetically distinct broodstock populations, stocking propagated species into restored habitat, development of non-lethal marking and tagging techniques, providing refugia for populations seriously impacted due to wildfire, drought, or other environmental conditions, conducting post-stocking assessments on survival and migration of introduced fish, development of methods to identify and track habitat preference, and other activities prescribed in approved Recovery and Fishery Management Plans.

To fulfill its long-term commitments, the NFHS established five-year (FY 2004 – FY 2008) targets for each performance measure outlined in the National Fisheries Program Strategic Plan. Achievement of those targets will help accomplish imperiled species recovery and restoration, including the delisting/downlisting of aquatic species on the Endangered Species list, and implementation of the Service's Aquatic Animal Drug and Chemical Use Policy. The development of the Fisheries Strategic Plan for FY 2009 – 2013 will begin in FY 2007.

Fish Technology Centers and Fish Health Centers support habitat investigations and provide the scientific foundation for recovery and restoration programs. The National Wild Fish Health Survey helps monitor habitat health that affects all wild aquatic animals. The Aquatic Animal Drug Approval Partnership (AADAP) Program provides the mechanism whereby hatchery and field biologists can access essential drugs and chemotherapeutants necessary to safeguard and manage critical stocks. NFHS recovery and restoration activities are conducted in coordination with State, Federal, Tribal, and private sector partners as prescribed by Recovery Plans and multi-entity Fishery Management Plans. These activities support the Department's resource protection goal to sustain biological communities on DOI managed and influenced lands and waters in a manner consistent with obligations regarding the allocation and use of water. The vast expertise within existing programs available to the Department and its partners will be brought to bear on the implementation of the National Fish Habitat Action Plan (Action Plan).

2008 Program Performance

In FY 2008, the NFHS will continue its comprehensive efforts to accelerate recovery of listed fish and other native aquatic species and addressing emerging conservation issues, including active participation in the Action Plan. Working with State and other federal partners, the NFHS will maintain its role in completing Recovery and Restoration Plan tasks, including: improving culture, spawning, and rearing methods; maximizing survival of broodstock and progeny; providing refugia to native aquatic populations in distress; developing data required for new animal drug approvals; obtaining information on biological threats to native populations; and propagating genetically fit native fish and mollusks for reintroduction into restored habitats.

Aquatic Species Conservation and Management

In FY 2006 the *M/V Spencer F. Baird*, was commissioned. Operated by the Service in the Great Lakes Region, the 95-foot *Baird* is a unique fish stocking and population assessment vessel that will annually stock nearly 4 million lake trout into Lakes Huron and Michigan, furthering a four-decade effort by the Service and its Great Lakes partners to restore depleted populations and establish self-sustaining populations of lake trout. The *M/V Baird* will support the Service's ongoing fisheries conservation work in native fish restoration, habitat restoration, and invasive species control.

In FY 2008, the NFHS will continue to implement tasks prescribed in fishery management plans, including developing fish culture technologies, conducting fish health assessments and diagnostics, coordinating and submitting technical section data for new aquatic species drug approvals, and producing healthy, genetically fit fish as identified in fishery management plans. Collectively these activities will help restore and maintain species such as lake trout, Atlantic and Pacific salmon, cutthroat trout, Arctic grayling, sturgeon, paddlefish, coaster brook trout, American shad, and other aquatic species to sustainable levels.

Aquatic Habitat Conservation and Management

In FY 2008, the NFHS will continue contributions to cooperative habitat conservation efforts, including involvement in the National Fish Habitat Action Plan, and will target projects that improve physical rearing environments to enhance survival of native fish when released and reduce non-dissolvable components of effluents from NFHS.

Increasingly, the Service's Fish Health Centers provide national and international leadership with partners such as the American Fisheries Society's Fish Health Section, NOAA Fisheries, the Department of Agriculture's Animal and Plant Health Inspection Service, and the State Department. In FY 2008, the NFHS's fish health program will continue to focus on: coordinating national-scope activities and submitting data to obtain new drug approvals for aquatic species; developing and implementing the National Aquatic Animal Health Plan (NAAHP) and the Service's Aquatic Animal Health Policy; conducting the National Wild Fish Health Survey (NWFHS); providing general aquatic animal health support activities for Service and non-Service partner facilities (hatchery inspections, diagnostics, etc.); and responding effectively to emerging conservation issues such as Viral Hemorrhagic Septicemia (VHS) and Spring Viremia of Carp (SVC). Vital to the health of aquatic systems, the NFHS, with States and other Federal agencies, plan to undertake a proactive and cooperative approach to address emerging aquatic animal health issues to prevent potential catastrophic losses to the Nation's aquatic natural resources.

Leadership in Science and Technology

In FY 2008, the Service's Fish Technology Centers (FTC) will continue to provide world-class scientific and technical leadership to solve "on the ground" hatchery and fishery management problems that are critical to many restoration and recovery programs, as well as mitigation programs. Contributions are made in many scientific disciplines including genetics, nutrition, reproductive biology, physiology, population dynamics, cryopreservation, biometrics, culture technologies, disease diagnostics, health management, and availability of critical new aquatic animal drugs. For example, the Lamar FTC (PA) initiated a study in FY 2006 to evaluate and identify the most productive freshwater habitat areas in the Sheepscot River (ME), for endangered Atlantic salmon recovery. Over a three-year period, using genetic marks on stocked fish, the study will identify optimal freshwater habitats for parr and smolt production and determine relationships between survival of salmon and macrohabitat variables, including abundance of predatory species. Genetic tools will be used to track fry and determine which tributaries and families produce adult returns to the river. Marked family groups are being stocked into designated reaches to assess stage-specific survival and distribution in the Sheepscot River. Habitat and species assemblages will be monitored and genetic parentage

analysis will be used to track juvenile movement throughout the drainage. The Abernathy FTC (WA) has completed the first phase of a diet study on the potential use of vegetable protein-based diet to lower contaminant levels in hatchery-reared fish. Use of vegetable protein diets may reduce tissue contaminant concentrations in fish produced by the NFHS, since vegetable oils and meals contain low levels of contaminants. Feeding trials were completed in 2006 and resulting fish samples are being analyzed for contaminants.

The Aquatic Animal Drug Approval Partnership program (AADAP) in Bozeman, MT is a partner-based National program established within the NFHS in FY 2004 that provides multi-agency coordination and broad support for efforts to obtain FDA approval for new aquatic animal drugs and therapeutants. AADAP leads a coordinated effort to generate data, analyze results, compile final study reports, disseminate information and data, and manage all other aspects of requisite data submissions to FDA in support of these new drug approvals. These drugs are critical not only to aquatic species in captivity and the management of wild stock populations, but also to the overall health and viability of the ecosystems in which these species reside. This partnership allows the otherwise prohibitive cost of the regulatory science and research needed for FDA approval to be shared by the Service, States, Tribes, the private aquaculture community, and other partners, including pharmaceutical drug sponsors. This partnership is integral to the Service's successful stewardship of our natural resources for the enjoyment of all Americans.

The AADAP's National Investigational New Animal Drug (INAD) Program, whereby legal access is provided to drugs and therapeutants currently in the drug approval pipeline, is essential in meeting the management needs of aquaculture programs throughout the United States. The importance of this program is exemplified by the 271 State, Tribal, private, university, and Federal aquaculture facilities that participated in this program in FY 2006. Participating facilities were located in 46 states and 2 U.S. Territories, and INAD-authorized treatments were used to assist in the management of 130 aquatic species.

In FY 2007 and beyond, the AADAP will continue to work cooperatively with a variety of pharmaceutical sponsors to coordinate efforts and generate the required data for new aquatic species drug approvals. For example, AADAP will provide guidance and work closely with the sponsor calcein, a new drug used to mass-mark fish for subsequent identification in the wild. Yet to be approved, but unlike other chemical marking agents, calcein (a fluorescein dye; trade name SE-MARK®) can be detected via non-lethal methods. SE-MARK® has tremendous potential for fisheries management, in particular as it relates to use on threatened and endangered species which are too valuable to sacrifice even a single animal. The AADAP will also continue to coordinate multi-agency efforts to meet aquatic species drug needs, including the generation and submission of critical data, dissemination of complete and up-to-date drug-use information to all user groups, and administration of INAD exemptions which allow the broad-scale use of investigational drugs and generation of essential efficacy and target animal safety data.

Partnerships and Accountability

In FY 2006 the NFHS worked with the Department's Legislative Affairs Office to develop legislation requested by the House Committee on Resources to establish a volunteer program for the National Fish Hatchery System and other offices of the Fisheries Program. Draft legislation was introduced by Representative Jim Saxton (NJ) on May 11, 2006 and became public law: *PL 109-396* on October 16, 2006. The NFHS will continue to develop and implement provisions of the law including a hatchery education program that will (1) provide outdoor classroom opportunities for students on fish hatcheries that combine educational curricula with the personal experiences of students relating to fish, aquatic species, and their habitat, and to the cultural and historical resources of the hatcheries; (2) promote understanding and conservation of fish, other aquatic species, and the cultural and

historical resources of the hatcheries; and (3) improve scientific literacy in conjunction with both formal and informal education programs.

In FY 2006, the NFHS joined with the National Wildlife Refuge System to hold a joint event in celebration of National Hunting and Fishing Day at the Tishomingo National Fish Hatchery and the Tishomingo National Wildlife Refuge (OK). In FY 2008 the NFHS will continue its work on the Fisheries Friends Group Initiative, including creation of a communication network with these groups and the design of a Fisheries Friends Group Directory and Handbook, as well as continued development and maintenance of a Friends website. Other partnership activities in FY 2008 will build on the successes of a pilot project to engage hunters and anglers in Service-sponsored fish and wildlife conservation programs.

Public Use

The NFHS's role in the restoration of depleted populations of native gamefish provides and enhances recreational fishing opportunities for the Nation's 34 million recreational anglers. All of this work is conducted in conjunction with State, Tribal, and NGO partners under approved fishery management plans. The Service's recent report, *"Economic Effects of Rainbow Trout Production by the National Fish Hatchery System"*, exemplifies the economic benefits accrued as a result on the NFHS's production of rainbow trout and provides a view of the impact the NFHS has on local economies. According to the report, \$5.4 million dollars expended by NFHS facilities in FY 2004 to grow and stock rainbow trout provided a total economic output of \$325.1 million dollars. These NFHS activities accounted for over 3,500 jobs and \$172.7 million in angling-related sales. Overall, for each taxpayer dollar budgeted for NFHS rainbow trout production, \$32.20 in retail sales and \$36.88 in net economic value are generated.

Mitigation

When Federal locks and dams were constructed, Congress and the Federal government committed to mitigate impacts on recreational, commercial, and Tribal fisheries. The Service supports mitigation fishery programs through the NFHS to address the adverse impacts of some of these projects. NFHS fish production for mitigation in the Southeast is estimated to generate more than \$107 million annually in direct expenditures on recreational fishing activities and maintains more than 2,800 jobs.

In September 2005, the Department determined that the Fish and Wildlife Service was being fully reimbursed by the Bureau of Reclamation for fish produced within the NFHS to mitigate adverse effects on fisheries resources associated with Reclamation water projects. Following this determination, the Department requested assistance from OMB in resolving cost recovery issues with the US Army Corps of Engineers (Corps). The Service estimated the cost of producing fish to mitigate for Corps water development projects to be \$4 million in FY 2005. Of this amount, \$3 million was spent on rainbow trout production that resulted in \$97 million in retail sales and \$111 million in net economic value.

The Service currently is developing options to obtain full cost-recovery from responsible Federal agencies. The Service is optimistic that a partnership between the Service, the Corps, and affected States and/or Tribes can be established that will allow the government to continue to provide value and efficiency to the public in meeting its mitigation responsibilities for federal water development projects.

Recovery of Species Listed Under the ESA

Recovery and restoration of imperiled aquatic species requires long-term commitment from a dedicated and diverse array of partners, scientific expertise, and financial resources. Years of coordinated effort focused on one endangered Western trout species has been rewarded with success.

On July 18, 2006, the final rule reclassifying the Gila trout from Federally-Endangered to Threatened was published in the Federal Register. The rule was promulgated as a result of habitat restoration, fish passage projects, captive propagation, the application of science and technology, and refugia projects initiated, funded, and accomplished by the Service's Fisheries Program, and partners from the US Forest Service, the New Mexico Department of Game and Fish, the Arizona Game and Fish Department, and New Mexico State University. The Rule provides for the States of New Mexico and Arizona to collaborate with the Service to allow for recreational fishing opportunities for this once critically-depleted species.

Alchesay-Williams Creek NFH (AZ) personnel will continue to work closely with the White Mountain Apache Tribe and with the Mora NFH & TC (NM) to develop and employ natural rearing techniques which encourages wild behavior and improves survival following reintroduction. Captive propagation, in concert with habitat restoration, has successfully restored this native trout to historic habitat. The Service will continue its efforts to recover other threatened and endangered native aquatic populations with the goal of delisting species currently on the Endangered Species List.

Maintenance and Equipment – Proposed Structure

		2006 Actual	2007 CR	Internal Transfer	2008			Change from 2007 (+/-)
					Fixed Costs & Related Changes (+/-)	Program Changes (+/-)	Budget Request	
NFHS Maintenance & Equipment	(\$000)	-	[16,527]	+16,527	+262	0	+16,789	+262
Annual Maintenance	(\$000)	-	[7,128]	[7,128]	[262]		[7,390]	[262]
Deferred Maintenance	(\$000)	-	[8,176]	[8,176]			[8,176]	0
Equipment	(\$000)	-	[1,223]	[1,223]			[1,223]	0
	FTE		[83]	+83		0	+83	0
FWCO Maintenance and Equipment	(\$000)	-	[1,316]	+1,316	0	0	+1,316	0
	FTE	-	[0]	+0			+0	+0
Total, Maintenance and Equipment	(\$000)		[17,843]	+17,843	+262		+18,105	+262
	FTE		[83]	+83			+83	+0

Program Overview

The Service's Fisheries Program has taken the necessary steps to systematically and objectively track and evaluate the condition of its real and personal property inventories, and to prioritize the management of these assets.

The proper management of Fisheries field assets is crucial to the Service's diverse aquatic resource missions, which directly support the Department's resource protection goals to sustain biological communities and to manage populations to self-sustaining levels for specific species. By ensuring that key fisheries assets are in effective operating condition, the health and safety of employees and visitors, and species held at the facility are ensured. A significant milestone was achieved in FY 2006 through the conversion of the Service's asset management from a stand-alone database application into the Service Asset and Maintenance Management System (SAMMS), a multi-divisional, integrated, Web-based information system based on a Department standard. The conversion to SAMMS provides more credible repair need summaries, a standardized method for asset management, and cross-divisional cooperation that has led to some management efficiencies.

The Fish and Wildlife Conservation Office, which provides critical habitat restoration and species assessment functions, has identified base funds for the management of its extensive inventory of vehicles, boats, and other critical equipment, valued at \$18 million. SAMMS now provides the basic information management structure that will enable this portion of the Fisheries Program to methodically track and prioritize the management of its mobile equipment.

National Fish Hatchery System Maintenance and Equipment

The NFHS continues to benefit from the rigor brought to its real property data through the condition assessment process. Keeping its mission critical water management assets in fully operational condition requires attention to both annual maintenance (regular servicing of complex water supply systems), and deferred maintenance (outstanding repair needs of these vital components). The NFHS has embraced the Office of the Inspector General's (OIG) recommendations on facilities maintenance, as well as DOI asset management initiatives, and has developed asset performance measures and a sound strategy for ensuring its crucial assets are kept operational.

Implementation of Departmental initiatives for asset management is central to the NFHS's approach to maintenance. Through development of inter-divisional and inter-bureau standardized terms and

methods, assets that are most critical to aquatic resource conservation missions are identified and prioritized. The credible assessments of condition and need results in effective funding decisions. To provide objective assessments of condition and need, the NFHS has developed several key performance measures for its critical assets.

Maintaining mission critical water management assets in good to fair condition is essential for the NFHS to meet its aquatic resource mission while complying with national environmental quality standards. These assets include those that directly influence the quality or quantity of water delivered and discharged, or assets that determine the actual rearing or holding environment of fish or other aquatic species being held. Keeping NFHS mission critical water management assets in the best condition supports DOI's resource protection goal of sustaining biological communities, as both water quality and quantity are critical elements in sustaining biological communities. Critical water management assets are estimated to comprise \$958 million of the NFHS's \$1.5 billion in asset replacement value.

The NFHS Maintenance Budget has three line items: 1) Annual Maintenance, 2) Deferred Maintenance, and 3) Equipment Repair and Replacement.

Annual Maintenance - NFHS annual preventive maintenance funds are used to pay salaries of maintenance employees, ensure timely repairs of hatchery facilities and equipment, purchase maintenance supplies (lumber, pipe, paint, tools, air and oil filters, etc.), and small equipment replacement (generally less than \$5,000), thus avoiding adding additional projects to the deferred maintenance backlog. Properly managed, annual preventive maintenance is a logical approach to emerging maintenance issues, addressing needs as they occur in a cost effective manner.

Deferred Maintenance – Deferred maintenance funding is directed to the repair, rehabilitation, or replacement of constructed assets. The NFHS's mission accomplishments are largely determined by the condition of its core assets associated with water delivery, aquatic species culture, and effluent management. These assets include those that directly divert, deliver, regulate and treat the water delivered to, and discharged from, the facility, and comprise and/or regulate the actual rearing or holding environment of fish or other aquatic species.

Projects are identified and tracked in Service maintenance databases and are prioritized for funding in the NFHS's Five-Year Deferred Maintenance Plan. Consistent with DOI guidance, projects are ranked and scored on the following criteria: 1) critical health and safety, 2) critical resource protection, 3) critical mission, and 4) other important needs. Additionally, deferred maintenance projects focusing on the NFHS's highest priority assets - mission critical water management assets and assets directly linked to Regional Strategic Plans - are considered along with DOI scores when prioritizing projects for the 5-Year Deferred Maintenance Plan.

Equipment: Routine Maintenance, Repair and Replacement – NFHS equipment is essential to mission accomplishment and is comprised of machinery (tractors, loaders, backhoes, riding mowers, etc.), fish transports (trucks, tanks, oxygen containment), standard vehicles (pickups, sedans, vans, etc.), and tools (table saws, welders, and hand-held power tools). With proper operation by trained and qualified operators, and with scheduled maintenance completed and documented on a timely basis, equipment will remain useable for the foreseeable future. Proper maintenance of equipment includes short and long-term storage.

The NFHS equipment line funds maintenance, repair and replacement of these items. Replacement generally targets those items with a value greater than \$5,000 and less than \$30,000, and passenger-carrying vehicles. More expensive equipment is presently identified for purchase through the Five-

Year Deferred Maintenance Plan. To avoid the need to purchase high dollar, specialized equipment, the NFHS works closely with the National Wildlife Refuge System to accomplish certain projects. In the event such arrangements cannot be accommodated because of scheduled equipment usage, specialized equipment is leased from the private sector and Refuge-based equipment operators are “loaned” to Hatcheries for the duration of the project.

Fish and Wildlife Conservation Office Maintenance

The Fish and Wildlife Conservation Office maintenance program element will address the maintenance and acquisition of property necessary for FWCOs to conduct core-mission activities required for the effective management of populations of federal trust species and their habitats. This equipment (boats, vehicles, sampling apparatus, etc.), valued at \$18 million dollars, provides the platform and the means to accomplish critical habitat restoration and species assessment functions. In FY 2008, base funding will be targeted at the acquisition and maintenance of aquatic species sampling equipment that allows FWCO's to assess the condition of aquatic resources, thereby more efficiently working toward the goal of restoring and maintaining native species of fish, and other aquatic resources, at self-sustaining levels. SAMMS now provides the basic information management structure that will enable this portion of the Fisheries Program to methodically track and prioritize the management of its mobile equipment.

2008 Program Performance

FY 2008 deferred maintenance projects targeting mission critical water management assets include the following:

- Replacing an antiquated alarm system at Lahontan NFH (NV) to monitor fish production water levels, ensuring survival of the listed Lahontan cutthroat trout.
- Rehabilitating the fish production raceway system at Williams Creek NFH (AZ) to ensure production of the threatened Apache trout is maintained to meet recovery tasks for this species, and to meet Service obligations to Native American Tribes.
- Rehabilitating a two-acre earthen pond at Carson NFH (WA) to prevent botulism outbreaks in chinook salmon. Lining the pond with concrete will prevent weed growth and fouling without using herbicides.
- Repairing the standby generator that supplies emergency power to the fish culture building at Dexter NFH (NM). The generator failed to start during the last two power losses at the station, and a steady power supply is essential to maintain the threatened and endangered species at the facility.

Presently, several states are permitting NFHS fish culture operations only because pollution abatement projects are on schedule in the maintenance or capital improvement plans. Any deviations from those schedules would likely lead to a reduction or cessation of production for such programs as Atlantic salmon and other imperiled species. All the critical maintenance issues that directly deal with human health and safety, water delivery, water treatment (both influent and effluent), fish culture, and efficient discharge are high priority for the NFHS. A highly dedicated NFHS workforce continues to maximize production of a large variety of aquatic species for restoration, recovery and mitigation. Rehabilitating or replacing these mission critical assets is essential to the continued success of meeting program goals, objectives and the expectations of the Service's many partners and stakeholders in aquatic resource conservation.

In addition to addressing critical maintenance needs, program accomplishments overall also contributed to performance-based management by being directly related to performance targets associated with Facility Condition Index (FCI) and percentages of field stations that have undergone Comprehensive Condition Assessments (CCA). From FY 2001 through FY 2005, 100% of NFHS

field stations underwent a CCA, completing the Department's aggressive approach on schedule. The first cycle of CCA's have directly contributed to the gradual reduction of the NFHS's officially reported repair need, through the elimination of needs that were not considered deferred maintenance. Locally, condition assessments have an immediate and direct effect on the FCI of individual assets, moving them from poor to good condition.

In FY 2008 the NFHS is committed to:

- Utilizing Washington/Regional/field personnel and consultants, approximately 21 hatcheries will undergo CCA's, to continue the second 5-year cycle. Additionally, efforts will continue to improve the assessment program by implementing knowledge gained in the first 5-year cycle and utilization of SAMMS to improve the efficiency of the data storage and retrieval system.
- Implementing an Asset Management Plan and an Asset Business Plan that outlines proactive strategies to maintain assets for their efficient and safe use. Multiple strategies will be identified and those which pose the greatest fiscal and asset benefits will be implemented. Additionally, Asset Business Plans developed by each Program at the Regional level will continue to be implemented, ensuring essential Service uniformity in managing its crucial assets.

The Service's NFHS is fully committed to the President's Management Agenda, linking performance with budget and continued implementation of the Department's Strategic Plan in FY 2008. The NFHS has continued development of outcome measures and modification of other long-term measures to accurately describe its contributions to the DOI End and Intermediate Outcome Goals. Actual accomplishments are being reported and baseline conditions for these performance measures have been verified for use in establishing performance targets for FY 2008. Performance measures may be further refined after discussion by a NFHS workgroup, and additional collaboration with the Sport Fishing and Boating Partnership Council (SFBPC), Department, and OMB personnel.

Aquatic Habitat and Species Conservation – Proposed Structure

				2008			Change from 2007 (+/-)	
				Fixed Costs & Related Changes (+/-)	Program Changes (+/-)	Budget Request		
Habitat Assessment and Restoration	(<i>\$000</i>)	-	[13,778]	+13,778	+272	+8,250	22,300	+8,522
	<i>FTE</i>	-	[69]	+69		+22	91	+22
Population Assessment and Cooperative Management	(<i>\$000</i>)	-	[30,908]	+30,908	+864	-500	31,272	+364
	<i>FTE</i>		[220]	+220		+0	+220	+0
Total, Aquatic Habitat and Species Conservation	(<i>\$000</i>)		[44,686]	+44,686	+1,136	+7,750	53,572	+8,886
	<i>FTE</i>		[289]	+289		+22	311	+22

Summary of 2008 Program Changes for Aquatic Habitat and Species Conservation

Request Component	Amount	FTE
Program Changes		
• Fish Passage Program	+6,000	+18
• National Fish Habitat Action Plan	+2,250	+4
• Alaska Fisheries Subsistence	-500	+0
Total, Program Changes	+7,750	+22

Justification of 2008 Program Changes

The 2008 request for Aquatic Habitat & Species Conservation is \$53,572,000 and 311 FTE, a net program change of \$7,750,000 and 22 FTE from the 2007 President's budget.

National Fish Passage Program (+\$6,000,000 / +18 FTE)

In FY 2008, the budget request for the Fish Passage Program includes an increase of +\$6,000,000 to support the goal of the Administration's Open Rivers Initiative (ORI), and will be used to implement in-the-water fish passage habitat restoration projects with an emphasis on removal of small, obsolete dams. The increased funding will support projects that otherwise would not be completed including the removal of approximately 110 additional small dams or other barriers, and re-opening approximately 1,300 miles and 18,000 acres of stream and river habitats to fish passage. Additionally, the increase will support an additional 18 FTEs and will enhance the Fisheries Program's capability to conduct field-level fish passage project implementation and assessments (inventories, monitoring, and evaluations), provide technical assistance to our partners, increase field-level and Regional coordination capabilities, and establish in-house, national engineering capabilities. The increase in funds will support implementation of cooperative in-the-water projects that will remove or bypass dams, dikes, water diversions, and other artificial barriers and the continued

development of the Fish Passage Decision Support System-all contributing to the Service's continued participation in multi-partner, nationally-significant fish passage projects.

The increase in funding will enhance the Fisheries Program's capability to continue working with our partners to deliver a "seamless" fish passage program across the American landscape, complementing efforts by our Federal partners such as the National Marine Fisheries Service (NMFS) in removing obsolete dams in coastal states and the Natural Resources Conservation Service (NRCS) in cost-sharing with landowners to remove small private dams and water diversions. The Fish Passage Program will give emphasis to the cooperative removal of dams in areas not already covered by National Oceanic and Atmospheric (NOAA) or U.S. Department of Agriculture (USDA). Through the use of the Fish Passage Decision Support System (FPDSS), the Service will work toward identifying and targeting areas, predominantly inland areas, but possibly some coastal areas as well, that are not the focus of the NOAA or USDA efforts and which would provide the best opportunities to ensure continued self-sustainable fish and other aquatic species, preclude listing of species under the ESA, and assist in the recovery of listed species. A modest portion of the increase will be used to update and improve inventories of dams and other fish passage barriers in priority watersheds and to incorporate new comprehensive barrier inventories in the FPDSS.

The Service will use the additional funds to implement cost-shared fish passage restoration projects that contribute to the performance goals of its National Fish Passage Program. Partners will include non-profit organizations, industry and commercial organizations, landowners, and state, local, and Native American tribal governments. Most projects costs will range from \$50,000 to \$250,000, will leverage partner cost share at greater than 50%, and will be completed within 24 months of initial funding. Funding will not be used for feasibility studies or other activities related to barriers owned by the federal government or dams currently or in the past licensed by the Federal Energy Regulatory Commission. Priorities identified by Fish Habitat Partnerships organized under the National Fish Habitat Action Plan will be considered in identifying fish passage projects.

The \$5,000,000 in base funding will be used to continue our efforts in removing or bypassing other barriers to fish passage, e.g., culverts and irrigation diversions. In addition, \$300,000 of base funding will be used toward activities that support the Penobscot River Restoration Project.

The Service is actively working with NOAA and USDA, as well as other Federal agencies, to coordinate planning and resources in a unified approach to fish passage restoration across the nation. In 2008, the Service will continue to fund projects that help to restore self-sustaining fish and mollusk populations, preclude listing of depleted species, and recover listed species. Dam removal projects identified in the Fisheries Operational Needs System (FONS) that may be funded through this increase include:

- Removal of Cornell Dam in the Niobrara River, a tributary to the Missouri River, in NE and SD, providing access to an additional 135 miles of critical habitat for the federally endangered pallid sturgeon.
- Removal of the Pigg River (Power) Dam which blocks the Pigg River, VA, restoring 26 miles of mainstem habitat to support the recovery of the federally listed threatened Roanoke logperch.
- Removal of the Tye River Dam, VA, restoring unimpeded access to 39 miles of historical American shad spawning and nursery habitat, and American eel nursery habitat in the Tye River, a tributary of the James River.
- Removal of Zemko Dam, Salem, CT, and site remediation of the Eight Mile River to promote self-sustaining populations of river herring, native mussels, and other aquatic flora and fauna. This project is designed to prevent the immediate threat of dam failure and associated environmental damage to downstream fish and habitat and will protect 72 acres of associated upland habitat.
- Removal of Springborn Dam, CT, and subsequent habitat restoration in over 20 miles of stream and providing access to historic spawning and nursery production areas, contributing to the recovery and restoration of American shad, American eel, alewife, blueback herring, sea lamprey, native mussels and other aquatic flora and fauna in the Connecticut River watershed.

- Coordinating with local communities, 4 dams in Massachusetts would be removed, opening over 100 miles of previously fragmented habitat for the restoration of brook trout and other native species and improvement of recreational opportunities.
- Natural channel design and removal of the dam located near the confluence of two main tributaries of the Betsie River, Wisconsin, and restoration of associated riparian areas, providing full fish passage to salmonid species in over 8 miles of habitat.
- The removal of up to 10 dams in the Delaware River watershed in PA including two on Perkiomen Creek and two on the West Branch of the Chester River-these 4 removals would open over 6 stream miles and enhance 3.9 miles of riparian and instream habitat, and 10 acres of wetlands.
- Removal of Steeles Mill Dam on Hitchcock Creek, a tributary of the Pee Dee River, NC, restoring access to over 13 miles of spawning and nursery habitat for American shad, hickory shad, Atlantic sturgeon, and striped bass, increasing nursery habitat for the catadromous American eel, and facilitate re-colonization by resident mussel populations.
- Removal of 3 dams in the Dog, Saxtons, and White Rivers in Vermont for the restoration of Atlantic salmon, sea lamprey, and American eel in the Connecticut and Winooski watersheds. (\$153,800)
- Removal of Hutchinson Dam will result in a run-of-the river system on the South Crow River, a major tributary to the Upper Mississippi River in Minnesota. Project would reconnect 47 upstream miles to 87 miles downstream to the Mississippi River. (\$114,000)
- Remove Swan Creek Dam and repair riparian community. Removal of the dams would open an additional 2 miles of stream for fish passage. (\$74,100)
- Removal of the German Farm Dam would result in 20 miles of riverine habitat opened for native resident fish in the Maumee River Watershed in northwest Ohio. (\$41,040)
- The Green River is an important cold water tributary to the Jordan River, one of Michigan's premier trout streams and a state designated Natural River. This project would remove a low head dam, thereby reopening 10 miles to brook trout. (\$44,600)
- Pinney Hollow Brook is a tributary in the White River watershed, a key habitat area for Atlantic salmon and brook trout in Vermont. Removal of a concrete dam to enhance fish passage and other aquatic species movement which is currently impaired by a restriction at the existing dam would open 2 miles to fish passage. (\$13,680)
- Antrim Creek is an important spawning stream for native brook trout and other salmonids. However since the 1970's, elimination of upstream habitat has reduced spawning fish numbers. Removal of the existing structure would revive over 4 miles of upstream habitat. (\$17,100)
- The project would improve access to 25 miles of upstream spawning and nursery habitat on the Ashuelot River in Swanzey, NH and is one component of a larger multi-dam passage project on the river that will eventually fully benefit Atlantic salmon, shad and river herring. (\$319,200)
- Remove Coles Brook dam on West Branch of Westfield River restoring brook trout access to 3 miles of habitat. Cole Brook watershed is completely forested. The system contains only one other barrier to fish passage (in the entire West Branch Westfield River). The reach downstream is designated as "exemplary aquatic habitat" by Massachusetts Heritage under the Living Waters project. Resident wild brook trout have been documented. (\$57,000)
- To restore fish passage to 4 miles of stream habitat within the headwaters of the Black River in Northern Lower Michigan with removal of Chandler Dam. (\$29,640)

The National Research Council has estimated that more than 2.5 million dams, and additional millions of poorly designed culverts and other structures, impede fish passage across the American landscape. Since its inception in 1999, the Fish Passage Program has supported 394 projects, with 166 partners, removing or bypassing 340 barriers, restoring access to over 3,810 miles of river and 53,700 acres of wetlands for fish spawning and growth. In addition, the program supported 335

habitat assessments and 187 population assessments. The Fisheries Operational Needs System (FONS) currently contains 331 fish passage projects totaling \$64,241,818 with willing partners that would contribute at least \$24,670,460 to remove or bypass 464 barriers and open access to 4,831 miles and 42,143 acres of historical spawning and rearing habitats for Federal trust aquatic species.

Program Performance Change: Fish Passage Program

Measure	2004 Actual	2005 Actual	2006 Actual	2007 CR ¹	2008 Base Budget (2007 PB + Fixed Costs)	2008 Plan	Program Change Accruing in 2008	Program Change Accruing in Outyears
					A	B=A+C	C	D
# of fish passage barriers removed or bypassed	131	123	106	77	77	191	+114	0
# miles reopened to fish passage	1,644	1,518	2,863	341	341	1,619	+1,278	0
# of acres reopened to fish passage	6,717	1,179	756	82	82	7,258	+7,176	0
# of habitat assessments completed	937	873	3,419	244	244	358	+114	0
# of miles of instream and shoreline habitat assessed.	38,871	38,507	38,441	817	817	979	+162	0
# of population assessments completed	1,744	1,585	2,187	1,310	1,310	1,370	+60	0
Comment	Performance values reported for the following measures: “# fish passage barriers removed”, “# miles of instream and shoreline habitat assessed” and “# of population assessments completed” are a sum of T&E performance and non-T&E (non-candidate) performance information.							
<p>1 The performance and cost data in the 2007 CR column is presented at the 2007plan level, which is based upon a projection of 2007 likely enacted made during the first quarter of 2007. The 2008 plan builds on the 2007 plan. To the extent Congress enacts a 2007 appropriation that is different from the 2007 projection, the 2008 plan may require revision.</p> <p>Note: Projected costs may not equal program change as these are full costs, which may include funds from other sources and (or) use averages.</p> <p>Column A: The level of performance and costs expected in 2008 at the 2007 President’s budget level plus funded fixed costs. Reflects the impact of prior year funding changes, management efficiencies, absorption of prior year fixed costs, and trend impacts, but does not reflect the proposed program change.</p> <p>Column D: Outyear performance beyond 2008 addresses lagging performance — those changes occurring as a result of the program change (not total budget) requested in 2008. It does <u>not</u> include the impact of receiving the program change again in a subsequent outyear.</p>								

National Fish Habitat Action Plan (+\$2,250,000/ +4 FTE)

The Fisheries and Aquatic Resource Conservation Program will utilize new funding under the National Fish Habitat Action Plan (Action Plan) to strategically implement priority on-the-ground habitat conservation and restoration projects and to enhance the capabilities of Fish and Wildlife Conservation Office field staff to conduct assessments and provide other technical assistance to effectively manage priority trust aquatic species and their habitats.

The National Fish Habitat Action Plan (Action Plan) was approved by the States through the Association of Fish and Wildlife Agencies on March 24, 2006. The Acting Secretary of the Interior and Secretary of Commerce signed a statement of support on April 24, 2006. The Action Plan is a science-based, voluntary, and non-regulatory partnership that will function through the National Fish Habitat Board and a set of regional-scale Fish Habitat Partnerships.

The mission of the National Fish Habitat Action Plan is to protect, restore, and enhance the nation's fish and aquatic communities through partnerships that foster fish habitat conservation and improve the quality of life for the American people. The mission will be accomplished through:

- Supporting existing fish habitat partnerships and fostering new efforts;
- Mobilizing and focusing national and local support for achieving fish habitat conservation goals;
- Measuring and communicating the status and needs of aquatic habitats; and
- Providing national leadership and coordination to conserve fish habitats;

Activities conducted under the Plan will be focused on the restoration and conservation of key habitats to: 1) promote de-listing and recovery of populations of federally-listed aquatic species to self-sustaining levels, and 2) to restore depleted populations of trust species and prevent the need for their listing. The 2008 request includes an increase of \$2,250,000 and 4 FTE for the Action Plan to implement high-priority projects. In addition, a portion of this increase will be used to increase the capabilities of FWCO field personnel to conduct assessments, monitoring, and evaluations of depleted or federally-listed aquatic species and to conduct surveys of the quality and quantity of their corresponding habitats. These funds will allow the program and its partners to strategically focus available resources on populations and watersheds most in need, and to use state-of-the-art management tactics and tools to work towards species conservation and recovery.

Under the Action Plan, FWCO will work directly with states, federal agencies, non-governmental organizations, and other partners. The FWCO will work cross-programmatically with the Partners for Fish and Wildlife (PFW), Coastal, and Endangered Species programs; the National Fish Hatchery System; and other Service programs toward common population recovery and habitat restoration goals. Cost-share projects will be identified by regional Fish Habitat Partnerships (FHPs). The FHPs serve as the primary Action Plan work units formed around watersheds and other distinct geographic areas, "keystone" fish species, and system types which are recommended by the Service and approved by the National Fish Habitat Board for implementation. Existing pilot FHPs include 1) Western Native Trout Initiative, 2) Eastern Brook Trout Joint Venture, 3) Matanuska-Susitna Salmon Conservation Partnership, 4) Midwest Driftless Area Restoration Effort, and 5) Southeast Aquatic Resources Partnership. Potential future FHP focus areas include: Reservoirs, Desert Fishes, and Large River Watersheds.

The proposed \$2,250,000 increase will enable the Fisheries Program to greatly increase and expedite the Service's work in implementing the Action Plan, and will provide funds to help:

- Facilitate coordination and leadership at the Regional level to develop FHPs and implement high-priority partnership projects;
- Implement on-the-ground cost-share projects identified by FHPs that are recommended by the Service Director and approved by the National Fish Habitat Board, and evaluate the effectiveness of selected projects and report results to the Board and others to help guide restoration efforts.

Projects that may potentially be funded through this increase include:

- Restoration of Gila trout in 8 miles of the Upper Mogollon Creek drainage in New Mexico to increase public angling opportunities in the Gila Wilderness, support down-and de-listing criteria identified in the Recovery Plan, and support continued development of partnerships between the Service, the Forest Service and the State of New Mexico;
- Emergency evacuation of Rio Grande cutthroat trout during wildfires, in partnership with Rio Grande tribes, New Mexico Department of Game and Fish, Forest Service, and Bureau of Indian Affairs (BIA), to ensure protection of key populations threatened by wildfire;
- Restoration of Apache trout in 24 miles of Conklin Creek watershed and 2.5 miles of Stinky Creek watershed in Arizona to increase species' occupied range, increase public angling opportunities in Arizona, and support down-and de-listing criteria identified in the Apache Trout Recovery Plan;
- Restoration of 20 acres of the West Indian Creek riparian corridor, a Midwest Driftless Area brook trout stream in southeast Minnesota, through re-establishment of native plant community (reduced sedimentation and improved stream bank stability to benefit native aquatic species);
- Restoration of 1.5 miles of aquatic habitat on Elk Creek, a Midwest Driftless Area brook trout stream in Vernon County, Wisconsin, through stream bank stabilization and erosion control (reduced sedimentation and improved stream bank stability to benefit native aquatic species);
- Restoration of over 3 miles of riparian habitat along Big Rock Creek, an important tributary to the Duck River in Tennessee, to benefit depleted populations of native eastern brook trout;
- Restoration of over 4.7 miles of Southern Appalachian brook trout habitat in the Chattooga River watershed in the Chattahoochee National Forest in Georgia to benefit depleted populations of native eastern brook trout;
- Restoration of 6 miles of brook trout habitat in the Smith Creek watershed in West Virginia through conversion of riparian (65 acres) and upland pasture (65 acres) to bottomland and upland forests, and reconnection of 2 miles of stream corridor;
- Restoration of 38 acres of riparian habitat and 3.5 miles of stream tributary to the North Fork of the South Branch of the Potomac River in West Virginia to benefit depleted populations of native eastern brook trout;
- Improvement of stream habitat and enhancement of fish passage to conserve and restore Colorado River cutthroat trout in six streams (totaling approximately 100 miles) in Utah and Colorado;
- Removal of nonnative trout, improvement of stream habitat and enhancement of fish passage to conserve and restore Colorado River cutthroat trout in six streams (totaling approximately 50 miles) on the Uintah and Ouray Indian Reservation;
- Assessment of key populations of bull trout and Westslope cutthroat trout and their habitats to strategically guide implementation of recovery actions for their restoration on tribal lands located in the northwestern corner of Montana;
- Modification of an existing irrigation diversion dam in Mill Creek, Wyoming to provide access to 38 miles of historic spawning and rearing habitat for Yellowstone cutthroat trout, a petitioned western trout species;

- Restoration (over the next 5-years) of in-stream and riparian habitats and improvement of fish passage to more than 100 miles of spawning and rearing habitats in the Matanuska and Susitna Rivers and their tributaries to benefit coho and silver salmon in Alaska;
- Creation of upstream and downstream migration capability at the City of Sumpter Water Supply Diversion (Sumpter, Oregon) dam on the McCully Fork of the Powder River to benefit native trout and salmon.

Additionally, this increase will include funding targeted for specific projects that have been identified and prioritized by the National Fish Habitat partnerships. Of the proposed increase, \$250,000 is included as part of the Secretary's Healthy Lands Initiative, and will be used to expand conservation activities in the Green River Basin of southwestern Wyoming where there is a critical need to coordinate energy development and species conservation across land ownerships. This project supports the goals of the *Western Native Trout Initiative*, a regional pilot FHP consisting of federal and state agencies, non-governmental organizations, industry, and others that directly support goals of the Action Plan. Also, as part of this effort, the Service will look for new opportunities to utilize the expertise and existing capabilities within the National Fish Hatchery System to implement Action Plan projects.

The Service anticipates that, with the additional funds, an additional 50 population assessments and 183 habitat assessments will be completed for native trust species, including the assessment of an additional 613 miles of stream and shoreline habitat. An additional 139 miles of stream and shoreline will be restored or enhanced to achieve habitat conditions to support species conservation.

Through the Association of Fish and Wildlife Agencies (AFWA), the states will lead the implementation of the Plan, in cooperation with the Service and other key partners. A National Fish Habitat Board (Board) has been established with the responsibility to promote, oversee, and coordinate implementation of the Action Plan. The Action Plan will create guidance for recognizing FHPs and for allocating national funding and related resources. Core staff from the Service, USGS, and NOAA's National Marine Fisheries Service will be co-located to assist the Board in administering all Federal funds and implementing programs designed by the Board.

The Service will lead other development activities important to the Action Plan implementation. As the lead Federal agency, the Service has convened the Federal Caucus, a working group of 19 agencies, for the purpose of jointly identifying strategies and resources that the agencies will employ to address the goals of the Action Plan. The Caucus will also work toward common performance measures that identify aquatic resource outcomes across the Federal government.

Within the Fish and Wildlife Service, all programs that address aquatic habitat conservation, such as the Fish Passage Program, will consider the priorities identified by FHP's and, where appropriate, focus their activities to address these priorities. FWCO field stations in particular will reorient base-funded activities toward priorities identified through FHPs, and provide leadership and technical support for development of projects, as well as monitoring and evaluation results.

Program Performance Change: National Fish Habitat Action Plan

Measure	2004 Actual	2005 Actual	2006 Actual	2007 CR ¹	2008 Base Budget (2007 PB + Fixed Costs)	2008 Plan	Program Change Accruing in 2008	Program Change Accruing in Outyears
# of habitat assessments completed	937	873	3,419	244	244	427	+183	0
# miles of in-stream and shoreline habitat assessed	38,871	38,507	38,441	817	817	1,430	+613	0
<i>Habitat Restoration:</i> Number of acres and stream/shoreline miles restored or enhanced to achieve habitat conditions to support species conservation								
Stream/shoreline miles.....	344	286	803	185	185	324	+139	0
# of population assessments completed	1,744	1,585	2,187	1,310	1,310	1,360	+50	0

1 The performance and cost data in the 2007 CR column is presented at the 2007 plan level, which is based upon a projection of 2007 likely enacted made during the first quarter of 2007. The 2008 plan builds on the 2007 plan. To the extent Congress enacts a 2007 appropriation that is different from the 2007 projection, the 2008 plan may require revision.

Note: Projected costs may not equal program change as these are full costs, which may include funds from other sources and (or) use averages.

Column A: The level of performance and costs expected in 2008 at the 2007 President's budget level plus funded fixed costs. Reflects the impact of prior year funding changes, management efficiencies, absorption of prior year fixed costs, and trend impacts, but does not reflect the proposed program change.

Column D: Outyear performance beyond 2008 addresses lagging performance — those changes occurring as a result of the program change (not total budget) requested in 2008. It does not include the impact of receiving the program change again in a subsequent outyear.

Alaska Fisheries Subsistence Management Program (-\$500,000)

Funding for Alaska Fisheries Subsistence Management Program will be reduced by \$500,000. The Alaska Subsistence Program manages subsistence uses by rural Alaskans on 237 million acres of Federal lands, encompassing 66 percent of Alaska's lands and 52 percent of Alaska's rivers and lakes. Rural residents in over 270 communities are entitled to subsistence fish and hunt on Federal lands. Since 1999, the Service has implemented activities to foster stakeholder participation. These actions have improved cooperative conservation through close consultation with the State and Native Alaskan organizations, and have allowed the State of Alaska to be better positioned to manage these resources.

Funding reductions would be achieved by decreasing financial support to the Alaska Department of Fish and Game. The State will continue to participate in the Federal subsistence fisheries management program and efforts to build partnerships, capability, and expertise in Alaska Native and rural organizations.

Since 2000, the Service has annually renewed cooperative agreements with the State of Alaska to facilitate coordination of State and Federal regulatory programs, management of subsistence fisheries, and information exchange. In preparation for a reduced level of support to the State, the Service will work with the State of Alaska in 2007 to prepare for this transition to the State taking responsibility for this activity and reduce the likelihood of negative impacts.

Program Performance Change: Alaska Fisheries Subsistence Management Program

Measure	2004 Actual	2005 Actual	2006 Actual	2007 CR ¹	2008 Base Budget (2007 PB + Fixed Costs)	2008 Plan	Program Change Accruing in 2008	Program Change Accruing in Outyears
					A	B=A+C	C	D
% of populations of management concern managed or influenced by the Fisheries Program for which current condition (e.g., quantity and quality) and trend is known	n/a	6.7% 78/1,165	7.4% 86/1,165	7.4% 86/1,165	7.4% 86/1,165	7.0% 82/1,165	-0.4% -4/1,165	0
# of populations managed for subsistence fishery harvest	82	82	87	82	82	82	0	0
# of population assessments completed	n/a	98	253	253	253	248	-5	0
# of training sessions (for Tribes)	n/a	6	16	10	10	7	-3	0
# of new or modified cooperative agreements (with Tribes) or Intergovernmental Personnel Act Agreements	n/a	23	24	24	24	18	-6	0

1 The performance and cost data in the 2007 CR column is presented at the 2007 plan level, which is based upon a projection of 2007 likely enacted made during the first quarter of 2007. The 2008 plan builds on the 2007 plan. To the extent Congress enacts a 2007 appropriation that is different from the 2007 projection, the 2008 plan may require revision.

Note: Projected costs may not equal program change as these are full costs, which may include funds from other sources and (or) use averages.

Column A: The level of performance and costs expected in 2008 at the 2007 President's budget level plus funded fixed costs. Reflects the impact of prior year funding changes, management efficiencies, absorption of prior year fixed costs, and trend impacts, but does not reflect the proposed program change.

Column D: Outyear performance beyond 2008 addresses lagging performance — those changes occurring as a result of the program change (not total budget) requested in 2008. It does not include the impact of receiving the program change again in a subsequent outyear.

Program Overview

Habitat Assessment and Restoration

Fish and Wildlife Conservation Offices work to manage and conserve habitats important to native federal trust populations. This work occurs at the national, regional, and local scale. Core activities in this program area focus prominently on restoring aquatic habitats, including assessing the ability of habitats to support healthy and sustainable aquatic populations, identifying important fish habitat needs, removing or bypassing artificial barriers to fish passage, installing fish screens, performing in stream and riparian habitat enhancement projects, and monitoring and evaluating results of habitat projects. The two major focus areas of the Habitat Assessment and Restoration Program are:

National Fish Habitat Action Plan: The Service is a partner with states, tribes, and other stakeholders in implementing the National Fish Habitat Action Plan (Action Plan). The Plan will foster geographically-focused, locally driven, and scientifically based partnerships to protect, restore, and enhance aquatic habitats and reverse the decline of fish and aquatic species.

Fish Passage Program: Millions of artificial barriers block fish movement in the United States and contribute to the depletion of migratory fish species, including many that are threatened or endangered. The Service's Fish Passage Program removes and bypasses barriers on a voluntary basis in cooperation with willing partners, who contribute approximately 60% of project funds.

Population Assessment and Cooperative Management

This program element would combine core activities previously addressed by the Anadromous Fish Management and the Fish and Wildlife Assistance program elements, currently contained within the Fish and Wildlife Management program. Core activities would focus on reversing declines in populations of federal trust aquatic species by assessing the status of populations of aquatic species of management concern; cooperatively developing and implementing plans for restoration, recovery, and sustainable fisheries; evaluating population responses to stocking and habitat restoration; managing subsistence fishery harvest on Federal lands in Alaska; conducting genetic assessments of wild fish populations; and providing technical assistance to Native Americans to support their fish and wildlife management actions. Fisheries management activities focus on listed and depleted populations of native species, as well as interjurisdictional fish species such as alewife, American eel, American shad, Atlantic sturgeon, blueback herring, striped bass, and Pacific salmon. In addition, the program would include activities conducted in support of Federal management of subsistence Fisheries in Alaska.

This Program also complements the work of other Service programs to achieve the agency's mission. For example, the Program works with the National Wildlife Refuge System to conduct population surveys in Refuge waters and help develop Comprehensive Conservation Plans. It works with the Endangered Species Program by serving on and/or leading recovery teams, and with the Habitat Conservation Program to review hydropower and other development projects for potential impacts to aquatic resources. Through coordinated planning and post-stocking evaluation, the Program works with the National Fish Hatchery System to implement effective restoration and recovery programs for native fish and mussels. The Program measures the performance of captive propagation programs, works with stakeholders to develop management and restoration plans that define the appropriate use of hatchery fish, and measures progress toward meeting plan objectives.

Program biologists identify the needs of priority trust species and their habitats, and strategically focus program expertise and resources on key watersheds, as determined by the Service and its partners. The Program works across jurisdictional boundaries with other state and federal agencies, and cross programmatically within the Service to implement management actions at the landscape

scale to recover populations of species to self-sustaining levels, and to preclude depleted species from listing by proactively addressing threats to their health and sustainability.

The Program also works with Native American tribes to assess fish and wildlife resources, develop management plans, coordinate fish stocking, and evaluate results of management actions on fish and wildlife resources under tribal jurisdiction. Additional activities include coordination with the Department of Defense of military installations under the Sikes Act to develop, implement, and revise Integrated Natural Resources Management Plans for military installations with significant natural resources.

2008 Program Performance

In FY 2008, the Fish and Wildlife Conservation Offices (FWCO) will continue their comprehensive efforts to assess the condition of aquatic habitats and populations, restore physical condition and fish passage, reverse declines in populations of federal trust aquatic species, manage subsistence fisheries in Alaska, provide technical assistance to Native Americans, and cooperatively develop and implement plans for restoration, recovery, and sustainable fisheries. FWCO will use the Fisheries Operational Needs System and Fish Passage Decision Support System to identify specific projects that could be conducted with requested funding to meet anticipated targets.

FWCO will continue efforts to recover threatened and endangered native aquatic populations with the goal of delisting species currently on the Endangered Species List. For example, years of coordinated effort focused on endangered Gila trout been rewarded with success in 2006 when the final rule reclassifying the species from Federally-Endangered to Threatened was published in the Federal Register. The rule was promulgated as a result of habitat restoration, fish passage projects, captive propagation, the application of science and technology, and refugia projects initiated, funded, and accomplished by the Service's Fisheries Program and its partners. In FY 2008, FWCO will continue to target other native aquatic populations with the goal of delisting them from the Endangered Species List.

Given the presence of fish and wildlife resources on their lands, Native American tribes are important conservation leaders. FWCO works with tribes to assess their fish and wildlife resources, develop management plans, coordinate fish stocking and habitat improvement, and evaluate results of management actions on fish and wildlife resources under tribal jurisdiction. In FY 2008, those efforts will continue, such as implementing the 2000 Consent Decree to manage fish stocks in the Great Lakes with 5 Chippewa/Ottawa Tribes and the State of Michigan, working with the Penobscot Indian Nation on effective salmon conservation in the northeast, and working with Tribes to evaluate big game herds such as deer, elk, and pronghorn antelope on Montana reservations. Service staff will also work with other partners across a variety of sectors, such as through the National Fish Habitat Action Plan and National Fish Passage Program, to support aquatic habitat and species conservation efforts.

Staff will continue efforts to enhance recreational fishing for native fish species on Refuge and military lands by updating Refuge Comprehensive Conservation Plans and fishery management plans, monitoring fish population status and trends, creating additional fishing access, enhancing habitat, and conducting outreach activities.

FWMA biologists work at the intersection between fisheries science and management, developing and using the latest technologies to tackle the nation's most challenging fish conservation missions. For example, all modules of the internal Fisheries Information System have been updated to a real-time web-based format to provide greater program-wide utility, allowing the system to be utilized by all staff and improving the Program's overall capabilities to manage federal trust species at multiple

scales. This new system will help generate new opportunities in FY 2008 to understand, assess, and respond to aquatic habitat and species challenges. In Region 3, staff will analyze population dynamics to help make harvest recommendations of local species.

Effective outreach is also important to working with partners and serving the public. Staff will conduct public events, such as those associated with National Fishing and Boating Week. In FY 2008, the National Fish Passage Program will also conduct an accomplishments analysis to better inform constituents about the opportunities and high level of accountability of FWCO's efforts.

Aquatic Invasive Species – Proposed Structure

				2008			Change from 2007 (+/-)	
				Fixed Costs & Related Changes (+/-)	Program Changes (+/-)	Budget Request		
State Plans/NISA Implementation	(\$000) FTE	-	[2,840] [6]	+2,840 +6	+23	0	2,863 6	+23 0
Prevention	(\$000) FTE	-	[1,445] [3]	+1,445 +3	+12	0	1,457 3	+12 0
Control Management	(\$000) FTE	-	[1,075] [3]	+1,075 +3	+12	0	1,087 3	+12 0
Total, Aquatic Invasive Species	(\$000) FTE	-	[5,360] [12]	+5,360 +12	+47	0 0	5,407 12	+47 0

Program Overview

The impacts caused by the introduction and spread of aquatic invasive species are among the primary reasons for the decline of native populations and their habitats. It is estimated that more than 50,000 non-indigenous species have invaded the United States and their ecological damages and control costs total more than \$137 billion per year. The most serious aquatic invading species based on damages and controls in millions of dollars per year are: fishes (\$5,400); zebra and quagga mussels (\$500); and others (\$3,000). One of the most serious ecological costs of biological invading species is the extinction of native species caused by non-native species. Approximately 40% of the species forced to extinction in aquatic ecosystems are due to predation, parasitism, and competition from biological invaders.

The pathways used by invasive species to move to new locations are not always obvious. Many problematic species, diseases and parasites have been transferred to new locations as undetected and unintentional hitchhikers. Because the non-native species are not readily detected in aquatic environments, their impacts to native species are not immediately known.

The Service's Aquatic Invasive Species (AIS) Program contributes to maintaining sustainable native populations and recovering threatened and endangered populations by preventing the introduction and spread of aquatic invasive species, monitoring habitats to determine the distribution of invasive species, rapidly responding to new invasions, and controlling established invaders. The Aquatic Invasive Species Program is committed to the implementation of the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (as amended by the National Invasive Species Act of 1996) and the Injurious Wildlife Provisions of the Lacey Act.

The proposed AIS subactivity is comprised of three program elements: State Plans/NISA Implementation, Prevention, and Control Management

State Plans/NISA Implementation

The Service implements and meets our mandates under the National Invasive Species Act (NISA) by funding the implementation of State, Interstate/Tribal Aquatic Nuisance Species Management (ANS) Plans that have been approved by the ANS Task Force; providing resources and support to the six Regional Panels of the ANS Task Force; providing operational functions of the ANS Task Force; and implementing prevention and control activities of NISA through the Fisheries and Aquatic Resource Conservation Program in the Service Regions.

Prevention

The Service implements activities to prevent the introduction, spread, and establishment of aquatic invasive species. These activities include: implementing HACCP (Hazard Analysis & Critical Control Points) plans to identify hitchhikers (or Hazards) and define actions that reduce the risk of hitchhiker spread through specific pathways; evaluating species for possible addition to the list of injurious wildlife under the Lacey Act; conducting detection and monitoring surveys for species such as round gobies, zebra mussels, and Asian carp in conjunction with routine field work; implementing “Stop Aquatic Hitchhikers!™” and “Habitattitude™,” social marketing campaigns that provide opportunities to change the behaviors of the target audiences; and efforts such as the 100th Meridian Initiative, which seeks to stop the movement of AIS species, particularly zebra mussels, at the 100th meridian.

Control/Management

In conjunction with the ANS Task Force and multiple state, industry, and federal partners, the Service has led and will continue to lead the development and implementation of plans to control and manage established aquatic invasive species. The Service is leading the implementation of the following National species management plans: ruffe, brown treesnake, Caulerpa, and mitten crabs. The Service is also leading the development of other species management plans.

2008 Program Performance

In FY 2008, the Aquatic Invasive Species Program will continue to engage in activities that support the DOI Resource Protection End Outcome Goal of *sustaining biological communities on DOI managed and influenced lands and waters in a manner consistent with obligations regarding the allocation and use of water*, under the Intermediate Outcome Goals of *managing populations to self-sustaining levels for specific species and improving information base, information management, and technical assistance*.

As in past years, the Service plans to contribute to maintaining sustainable native populations and recovering threatened and endangered populations by preventing and controlling aquatic invasive species. In FY 2008, as described below, the Service, building on accomplishments in FY 2006 and anticipated in FY 2007, also plans to: (1) work with additional state and tribal partners to implement new State/Interstate ANS management plans; (2) continue actions that prevent the introduction and spread of aquatic invasive species; and (3) engage in new collaborative activities to control and manage existing populations.

The Service works with multiple State, interstate, and tribal partners to implement ANS Task Force-approved ANS management plans. In FY 2006, the Service worked with two additional states to develop and gain approval to implement ANS management plans. In FY2007 and FY 2008, the Service will work with additional states to facilitate the development of new ANS plans or the revision of existing ANS management plans.

To prevent the introduction and spread of aquatic invasive species in FY 2006 and FY 2007, the Service implemented HACCP plans at Fisheries field stations in all Service Regions to minimize the risk spread of aquatic invasive species; conducted surveys for early detection of aquatic invasive species; completed injurious wildlife evaluations for silver carp and largescale silver carp and published a proposed rule in the Federal Register; expanded the number of partners in the “Stop Aquatic Hitchhikers!™” and “Habitattitude™” social marketing campaigns; completed the draft rapid response plan to prepare for the potential discovery of zebra mussels in the Columbia River Basin; and less than a week after the detection, initiated an effort with over 120 volunteers and over 200 hours of labor to rapidly respond to and eradicate a population of purple loosestrife in Alaska, thereby protecting hundreds of wetland acres from potential infestation. In FY 2008, the Service will increase

the implementation of HACCP plans at field stations, which will reduce the risk of introducing new AIS through Service field work; conduct injurious wildlife evaluations for additional species; continue current and initiate new detection and monitoring surveys to identify new introductions or range expansions of AIS.

In FY 2006 and FY 2007, the Service contributed to the control of established aquatic invasive species by coordinating and assisting in cooperative control efforts to reduce and eradicate populations of *Cryptocoryne beckettii* in the San Marco River; and, in conjunction with multiple partners, completed and published the draft National Management and Control Plan for Asian Carps in the United States and the draft National Management and Control Plan for New Zealand mudsnails in the Federal Register for public comment. In FY 2008, the Service will continue collaborative and innovative efforts with states and other ANS Task members Force to control established invaders such as ruffe, Asian carp, and New Zealand mudsnails.

Marine Mammals - Proposed Structure

				2008			Change from 2007 (+/-)
				Fixed Costs & Related Changes (+/-)	Program Changes (+/-)	Budget Request	
Stock Assessment/Conservation Management	(\$000) FTE	- [2,186] [18]	+2,186 +18	+76	0	2,262 18	+76 0
Cooperative Agreements	(\$000) FTE	- [257] [1]	+257 +1	+4	0	261 1	+4 0
Total, Marine Mammals	(\$000) FTE	- [2,443] [19]	+2,443 +19	+80	0 0	2,523 19	+80 0

Program Overview

Marine Mammals are a resource of great aesthetic, economic, cultural, and recreational significance. As cornerstone species occupying upper trophic levels within oceanic and marine ecosystems, marine mammals provide valuable insights into the health and vitality of an ecosystem that occupies a majority of the global area.

The United States provides leadership in the protection and conservation of the marine environment and marine mammals through vigorous research and management programs that have been underway for decades. One of the most important statutory authorities for conserving and managing marine mammals is the Marine Mammal Protection Act (MMPA). The MMPA assigns the Department of the Interior responsibility for the conservation and management of polar bears, walrus, sea and marine otters, three species of manatees, and dugongs. This responsibility has been delegated to the Service. Under the MMPA, marine mammal populations, and the health and stability of marine ecosystems upon which they depend, are required to be maintained at, or returned to, healthy levels. The Service's Marine Mammal Program acts to conserve and manage the three stocks of northern sea otter in Alaska, the northern sea otter population in Washington State, polar bear and Pacific walrus in Alaska, as well as support recovery of the listed (under the Endangered Species Act) southern sea otter in California, the southwest Alaska distinct population segment of the northern sea otter, and the West Indian manatee in Florida and Puerto Rico.

The proposed Marine Mammal subactivity is comprised of two program elements: Stock Assessment/Conservation Management and Cooperative Agreements.

Stock Assessment/Conservation Management - The Marine Mammal Program for the U.S. Fish and Wildlife Service (Service) conserves and manages marine mammal species under our jurisdiction by implementing the Marine Mammal Protection Act (MMPA). The majority of the Service's marine mammal funding is provided for stock assessment, conservation, and management activities in Alaska; the balance of funding under this program element provides for national coordination in the Washington Office. In general, program activities in Alaska address population monitoring and assessment, monitoring and recording harvest information, cooperative activities with Alaska Natives, and development of international agreements for marine mammal populations shared with Canada and Russia. Activities to conserve marine mammal stocks outside Alaska are pursued under Ecological Services funding and primarily through endangered species recovery efforts.

Cooperative Agreements - Section 119 of the MMPA authorizes the Service to enter into cooperative agreements with Alaska Native organizations to conserve marine mammals and provide for co-management of subsistence use by Alaska Natives. The purpose of the agreements is to develop capability in the Alaska Native community to actively participate in management of subsistence harvest and collect information on subsistence harvest patterns and harvested species of marine mammals. Efforts pursued under this program element enhance our communications with Alaska Native communities and allow the initiation of projects with the potential to significantly increase our collective understanding of marine mammals and gather information critical for developing long-term conservation strategies.

The Service recognizes that meeting our mandate for the conservation of marine mammal species requires communication, consultation, and cooperation with other Federal agencies (including NOAA-Fisheries, the Marine Mammal Commission, and USGS/BRD), State Governments, Alaska Native Organizations, scientists from numerous institutions and organizations, industry groups, non-governmental organizations, and others. Through active collaboration and coordination, we are able to enhance the effectiveness of our efforts to implement the MMPA.

To carry out its responsibilities, the Service:

- prepares, reviews, and revises species management plans and stock assessments;
- conducts and supports a variety of biological investigations, research, and studies with management applications;
- assesses population status and trends;
- develops and implements management plans and habitat conservation strategies;
- promulgates and implements incidental take regulations;
- conducts harvest monitoring projects for Alaska species;
- implements the Marking, Tagging, and Reporting Program for polar bears, walrus, and northern sea otters harvested by Alaska Natives;
- implements the 1973 International Agreement on the Conservation of Polar Bears between the U.S., Canada, Russia, Norway, and Denmark (for Greenland); and,
- develops and supports U.S. bi-lateral and multi-lateral efforts and agreements for the conservation and management of marine mammal species.

The Service works with Alaska Native Organizations (ANOs) to assess subsistence harvest, determine sustainability of harvests, and gather biological information from harvested animals. This collaborative effort provides the Service with important information on the health and status of populations of marine mammals subject to Alaska Native subsistence harvest. Furthermore, the Service works with ANOs to develop and implement voluntary marine mammal harvest guidelines. Both the Service and ANOs recognize the importance of maintaining sustainable marine mammal populations to meet Alaska Native subsistence, cultural, and economic needs. Because the MMPA does not provide a mechanism for regulating subsistence harvest of marine mammals, unless a stock becomes depleted, the Service and ANOs strive to ensure harvests are conducted in a biologically sound manner. The Service is working with its ANO partners, and others, to enact enforceable harvest management mechanisms through the reauthorization of the MMPA.

The Marine Mammal Program's activities support the Department of the Interior's Strategic Plan Resource Protection End Outcome Goal of *sustaining biological communities on DOI managed and influenced lands and waters in a manner consistent with obligations regarding the allocation and use of water*, through the Intermediate Outcome Goals of *managing populations to self-sustaining levels for specific species and improving information base, information management, and technical assistance*.

2008 Program Performance

In FY 2008, the Service plans to: maintain cooperative agreements with ANO and international partners; monitor status and trends of marine mammal populations; and implement incidental take regulations related to oil and gas industry activities and two stocks of marine mammals on the north slope of Alaska. In FY 2008, as described below, the Service plans to build on accomplishments in FY 2006 and anticipated in FY 2007 to:

- implement new incidental take regulations related to oil and gas industry activities in the Chukchi Sea;
- continue analyses of the data gathered during range-wide surveys for Pacific walrus to improve knowledge of its population trends; and
- engage in new collaborative activities with Russian partners related to conservation and management of the Bering/Chukchi Seas polar bear population.

Cooperative Agreements: In FY 2008, the Service will maintain cooperative agreements with the Alaska Nanuq Commission, the Eskimo Walrus Commission, and a coalition of Native marine mammal commissions interested in sea otters, for monitoring and management of polar bears, Pacific walrus and northern sea otters, respectively, through base funds. These cooperative agreements pertain to harvest monitoring, traditional knowledge surveys, and biological monitoring and sampling. As a result of additional appropriated funds in each of fiscal years 2002 through 2006 the scope of these agreements were expanded. In FY 2007 and FY 2008 the scope, and the number, of joint efforts pursued under the agreements will be reduced. The scaled-back agreements will continue to play an important role in maintaining partnerships with Alaska Natives; partnerships that provide key management tools for understanding population trends and managing subsistence harvest.

Managing Marine Mammal Incidental Take: In FY 2006, the Service promulgated comprehensive regulations under the MMPA to authorize incidental taking of polar bear and Pacific walrus in the course of oil and gas industry operations in the Beaufort Sea/North Slope area of Alaska. These regulations holistically analyze the activities and potential take (non-lethal, and primarily by harassment) of all operators in the area over a five year period. They ensure that the total anticipated taking will have a negligible impact on the species. The Service will issue annual Letters of Authorization (LOAs) to operators that describe permissible methods of take, measures to ensure the least practicable impact on the species and subsistence, and requirements for monitoring and reporting. In FY 2006, the Service also issued for the first time, incidental harassment authorizations under the MMPA for 4 requesting entities operating in the Chukchi Sea. A similar negligible impact analysis was conducted for these requests and mitigation and monitoring measures to minimize the taking were required in the authorizations.

Status and Trends of Marine Mammal Populations: In FY 2008, we will seek collaborative opportunities with partners and stakeholders to conduct surveys and track status and trends of the 6 marine mammal stocks in Alaska. This includes building upon the landmark 2006 range wide survey of Pacific walrus by continuing our collaborative efforts with Russian colleagues to develop techniques to monitor Pacific walrus population trends. The Service's continued efforts on this project strengthen the relationships and coordination with our Russian colleagues. In addition the Service plans to review and update stock assessment reports under the MMPA for 6 of 10 marine mammal stocks in FY 2007.

Polar Bear Listing Petition

In FY 2008, the Program will continue to support the process to evaluate the petition to list polar bears as threatened under the Endangered Species Act; this process began in FY 2006. Information

gathered as part of ongoing Marine Mammal Program activities, such as population assessments, will be incorporated into the status review and analyses prepared as part of the petition review process.

Polar Bear Bilateral Agreement: On October 16, 2000, U.S. and Russia signed a bilateral agreement for the Conservation and Management of the Alaska–Chukotka Polar Bear population. In early FY 2007, after years of cooperative work between the Service and Congress, Congress enacted legislation to implement this treaty. The legislation was necessary to address concerns regarding illegal and unquantified harvest of bears in Russia as well as unrestricted harvest in Alaska. In FY 2007, the Service will conduct initial assessments on how to implement the agreement within existing budget parameters. In FY 2008, the Service will seek to work with our Russian Native and Government partners, and Alaska Native partners, to implement the treaty through cooperative efforts and the joint committee established by the treaty.

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